DOCUMENT RESUME

ED 151 874 CS 502 010

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TITLE Predispositions towards Verbal Behavior in Task Oriented Interaction.
PUB DATE Dec 77
NOTE 33p.; Paper presented at the Annual Meeting of the Speech Communication Association (63rd, Washington, D.C., December 1-4, 1977)

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS *Group Behavior; *Interaction; *Interpersonal Competence; *Language Patterns; *Speech Communication; Speech Habits; Task Performance; *Verbal Communication
IDENTIFIERS *Communication Research

ABSTRACT

The two studies of predisposition toward verbal behavior (PVB) reported in this paper examined the behavior of interactants who have dissimilar verbal predispositions in task-oriented discussions. In the first study, 20 groups of three members each were given an interpersonal task that involved reaching a consensus. In the second study, 17 pairs made up of a high- and a low-PVB subject were involved in an interpersonal discussion. Results from both studies indicate that differences in the behavior of PVB subjects hold true in interpersonal settings; dissimilar PVB subjects perceive their own and others' predispositions toward verbal behavior accurately; low-PVB subjects were liked as much as high-PVB subjects, perhaps because there was not enough time for networks of interpersonal attraction to develop; and subjects' predispositions toward their verbal behavior have a rich set of behavioral and cognitive consequences in task-oriented interactions. Six tables and three appendixes regarding study results are included. (CC)

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PREDISPOSITIONS TOWARDS VERBAL BEHAVIOR IN TASK ORIENTED INTERACTION

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A Paper Presented at the Annual Convention
of the Speech Communication Association
Washington, D.C.
December, 1977

CS502010

PREDISPOSITIONS TOWARDS VERBAL BEHAVIOR

IN TASK ORIENTED INTERACTION

Over the past several years we have been investigating the cognitive activity that persons use in monitoring the flow of talk in face-to-face interaction. Early accounts of speaking style erred by reducing the issue to the constraints of personality. Characteristic differences in the frequency and duration of talk were viewed strictly as a function of certain enduring features or traits of personality such as extroversion or field dependence. The trait approach ignored evidence that people tend to accomodate their speaking styles to the talk patterns of other interactants. More recent explanations have erred in the opposite direction, however, by regarding the formal properties of interaction as though they were strictly situation or rule governed. Accounts based solely on situational determinism ignored the limits of reciprocity as well as evidence suggesting that the more generic features of speaking style tend to be somewhat consistent across various classes of social situations. The model we have used in studying the formal attributes of verbal behavior "assumes that the salient properties of communication result from a complex interplay between expectations and unfolding social reality (Mortensen and Arntson, 1974, p. 429; see also Endler and Magnusson, 1976).

We began our inquiry by developing a self-report instrument to measure people's generalized expectations about their own communication (Predispositions toward Verbal Behavior). Having established reasonable validity and reliability indices (Mortensen, Arntson, and Lustig, 1977), we began to test the interaction between people's predispositional states and specific situational variables. This line of inquiry required tight experimental designs to control for specific situational

variables and subjects' PVB levels.

In highly structured interview situations, neither the salience of the task (Mortensen and Arntson, 1974), nor levels of congruency (Arntson and Mortensen, 1976) evoked changes in the relative duration of responses by high, middle, and low PVB subjects. However, levels of understanding significantly interacted with PVB levels. There was no difference in mean length of responses when high and low PVB subjects were not being understood (Arntson and Mortensen, 1976). PVB by situation interactions continue to be researched in structured interview settings.

The two studies reported here are concerned with another line of inquiry into PVB states and communication situations. The studies examine PVB subjects' behavior in task oriented discussions with interactants who have dissimilar verbal predispositions. The two investigations attempt to expand our understanding of the PVB construct in four ways. (1) While previous research was limited to highly structured interview settings (Hewes, Haight, and Szalay, 1976), we have not yet investigated PVB subjects' conversational behaviors. Do differences in the verbal behavior of PVB subjects hold in interpersonal settings where a host of relational variables can emerge?

(2) So far, we know very little about how various dispositional states toward communication are affected by interaction with persons who have similar or dissimilar states. Several researchers (Lennard and Bernstein, 1969; Jaffe and Feldstein, 1970; Cappella, 1976), suggest that participants attempt to "mesh" their expectations about interaction patterns. Both of the studies reported here examine interaction behavior between dissimilar PVB subjects. One study examines changes

in subjects' verbal behavior over six time periods. The other study conducts a first-order Markov analysis of the subjects' sound-silence patterns. Prior PVB research has only taken overall summary measures of verbal behavior.

(3) An important variable in any communication situation is the function served by a given speech act. To date, PVB differences have been examined primarily in referential contexts; additional research is needed in other functional settings. Communication in small groups can serve two broad functions: Fulfilling task and maintenance goals. Thus, we can observe whether PVB subjects' differ in initiating task and mainenance behaviors.

(4) The two studies reported here also expand our knowledge of the way PVB subjects differ in a range of behaviors, perceptions, and group roles. The structured interview studies were limited to only one behavioral and three perceptual variables (Hewes, et. al., 1976). Yet if predispositions toward verbal behavior have any practical significance at all, they must have a richer set of behavioral and perceptual consequences in communication contexts. Past research indicates that talkative persons were found to be more productive (Norfleet, 1948), more task oriented (Strodtbeck and Mann, 1956; Knutson, 1960), more leader-like (Bass, 1949; French, 1950; Borgotta and Bales, 1956; Jaffee and Lucas, 1969), more influential (Strodtbeck and Hook, 1961; Bevales, Hastorf, Gross, and Kite, 1965), than their less verbal counterparts. Our research attempted to see if similar differences existed between high and low PVB subjects.

STUDY ONE

This study consists of 20 talk oriented groups made up of a high, middle, and low PVB subject. Ten of the groups were given unlimited time to complete the task. The other ten groups were given only ten minutes. Differences in the subjects' verbal behaviors, perceptions and decision making patterns were examined.

Method

Procedures

Each subject was introduced to the other two group members and asked to read a general instruction sheet. The sheet also included a circular arrangement of eleven potential national issues. Subjects were asked to come to a consensus about what the general public considered the three most important and three least important national issues. After the subjects read the instructions and studied the issues, the experimenter answered questions, told them how much time they had, and positioned the two microphones. The group session was taped from the next room. When the group was through, they filled out a questionnaire and talked to the experimenters.

Design

The experiment was designed to create a group consisting of a high, middle, and low PVB subject, to control for sex differences, and to create two levels of time pressure. From over 350 persons who filled out the PVB instrument, 20 subjects were selected with scores 1.25 SD above the mean (HPVB), 20 with scores .25 SD about the mean (MPVB), and 20 subjects with scores 1.25 SD below the mean (LPVB). Ideally control for sex differences should make provisions for all permutations

in a group (MMM, MMF, MFF, FFF). Unfortunately we do not have a large enough population to cross the appropriate sex composition in each group with the three PVB levels. Since the strongest differences in communication are known to occur between members of the opposite sex, the groups were composed of either all male or all female members. There were 14 female and six male groups. Time pressure was manipulated by telling each group that they either had only ten minutes or as long as they wanted to complete the task. The time limit groups were told that although it would be difficult, they should try to complete the task in ten minutes. A kitchen timer set for ten minutes was placed in the room. Seven female and three male groups were placed in each time pressure condition.

Dependent Measures

There were three sets of dependent measures: Behavioral, perceptual, and observational.

Behavioral Measures. Two behavioral measures were used: The frequency and duration of communication. Each group's discussion was divided into six equal time periods. In each time period the frequency and duration of the PVB subjects' verbalizations were measured. Frequency was computed by counting the number of times the subject spoke, disregarding fillers and one word introjections. Duration was measured in seconds.

Because the groups spent between 6 and 26 minutes talking about the task, subjects' frequency and duration scores were standardized. Multiplying the PVB subjects' frequency and duration scores by a constant within each group does not change their relative differences.

The frequency and duration of talk within each time period after standardization still indicates whether time pressure caused subjects to alter their verbal behavior within a given time period.

Perceptual Measures. The perceptual variables are taken from the post-group questionnaire (Appendix A). A total of eight variables were used in this study. Perceived verbal participation consisted of four Likert-type ratings in which the subjects estimated the loudness, rate, spontaneity, and frequency of their own verbal behavior in the group. In previous investigations, we found a linear relationship between PVB scores and perceived verbal participation. Others' perceptions of each subject's influence was measured by summing the other two group members' responses to questions two, three, and four for each subject. For each question the subjects were asked to compare every member in the discussion with every other member. Consider how Jeanne answered question two.

> 2. Between each of the following pairs of participants, whom do you think was most influencial in moving the group towards consensus?
>
> | | | | | | | | | | |
> |---|---|---|---|---|---|---|---|---|---|
> | 4 | Jeanne | ___ | ___ | ___ | X | ___ | ___ | ___ | Julie | 4 |
> | 1 | Karen | ___ | ___ | ___ | ___ | ___ | ___ | X | Jeanne | 7 |
> | 6 | Julie | ___ | X | ___ | ___ | ___ | ___ | ___ | Karen | 2 |
>
> Karen = 3; Julie = 10; Jeanne = 11

The numbers in the margins indicate how the question was scored. Karen's other influence score would be the sum of Both Jeanne's and Julie's comparisons across the three questions. Self perceptions of influence was measured by summing each subject's perceptions of his/her own influence, talkativeness, and contributions in the group. In answering question two, Jeanne's self perception score was 11. Her total self influence score was the sum of her own scores across the three questions. Each subject's perceived involvement in the

group's discussion was measured by question five on the post test. Perceived time pressure was measured by summing responses to questions six and eight. This variable was used both to check the time pressure manipulation and to see if there was an interaction effect between amount of time pressure and PVB levels. Perceived satisfaction was computed by summing the answers to questions seven and nine. Others' perceptions of expertise was computed by summing the other two members' ratings of each subject across four Likert scales (Questions 10 and 11). The four bi-polar pairs were intelligent-unintelligent, informed-uninformed, reliable-unreliable, and qualified-unqualified. Others' perceptions of liking was measured by summing the other two members' ratings of each subject across four Likert scales (Questions 10 and 11). The four bi-polar pairs were honest-dishonest, friendly-unfriendly, pleasant-unpleasant, and nice-awful.

Observational Measures. The categories used to examine the task oriented interaction of the PVB subjects were taken from the Interaction Chain method for analyzing small group communication (Johnson, Arntson, and Mortensen, 1973). Appendix B illustrates the chain analysis for one three person group consisting of Beverly, Gail, and Carol. This discussion took approximately 12 minutes. The interaction chain analysis occurs in a three step sequence. First, the discussion is coded into content categories. Second, the content categories are grouped together into interaction chains. Third, the content categories within each interaction chain are analyzed in relationship to each other.

Each comment is designated by a first name initial (B,C,G, indicating who is talking), a content symbol (1-11, identifying the issue being discussed), and a content category symbol (+, -, ?, X). A "+" shows a favorable reference to any given issue. A "-" indicates an unfavorable

response to a given issue. A "?" indicates that a person brought up or extended an issue in the form of a question. A "X" represents a procedural or a social-emotional comment that was not related to any of the eleven issues.

With reference to Appendix B, the first five comments, (CX, GX) (B3-, G3- C3-4+), would be interpreted as Carol making some sort of procedural or social-emotional comment; Gail following suit; Beverly indicating that issue three should not be included in the group's decision; Gail also speaking against issue three; and Carol both negatively mentioning issue 3 and positively mentioning issue 4.

The second step in analyzing the interaction is segmenting the string of coded comments into interaction chains. A string of comments become bracketed into an interaction chain when a comment is succeeded by two unrelated issue or digressive comments. (See Appendix B for how the comments are b.acketed into interaction chains.)

Finally, the coded comments in each interaction chain are placed into seven relationship categories. These categories are determined by the relationship of each coded comment to the previous comment. The first reference to any task issue is classified as an initiation. There can be only eleven initiations per group. Reintroduction of an issue by any group member is classified as a reinitiation. A comment cannot be classified as a reinitiation if the previous comment is talking about the same issue. Positive extensions indicate agreement between two participants in sequence. Both comments may be positive or negative about the same issue (B3-, G3-, or B3+, G3+). Negative extensions show that two consecutive comments are in disagreement about the same issue (B3+, G3-, or B3-, G3+). Interrogative extensions perpetrate discussion of an issue by seeking further information or clarification (B3-, G3?). The first act in a digressive chain or within another chain is termed a digressive initiation. A digressive comment which serves to perpetrate a digressive chain, although it may not be related to the content of the previous comment, is classified as a digressive extension.

The validity and reliability of the interaction chain system is developed by Johnson et. al. (1973); the inter-rater reliability of two coders for the present study was greater than 95 per cent agreement. Once the content decisions are made, the seven relationship categories are unambiguously determined.

The seven relationship categories are used in the present study to examine the problem solving interaction of the different PVB subjects in the twenty groups. Differences in task leadership can be measured by initiations and reinitiations. Different styles of decision-making interaction can be examined by positive, negative, and interrogative extensions. Differences in the number of digressive initiations and extensions may indicate a more social-emotional, less task oriented interaction style.

Hypotheses

Based on our previous interview studies, we tested three planned comparisons: There would be a significant linear relationship between $\overline{\text{HPVB}}$, $\overline{\text{MPVB}}$, and $\overline{\text{LPVB}}$ for duration, frequency, and perceived verbal participation. All comparisons had to exceed a critical value at alpha equals .05. Since all remaining comparisons were exploratory, critical values had to exeed a value at alpha equals .05 two tailed. Besides the planned comparisons, we tested the main effects of PVB on the remaining seven perceptual and seven observational dependent measures. The main effects of time pressure were also tested for duration, frequency, and perceived time pressure. Two interaction effects were examined: PVB levels by the six time periods and PVB levels by time pressure for duration and frequency.

Test Statistics

The statistical design for testing the effects of PVB levels and time pressure on frequency and duration was a split-plot factorial design with two completely crossed factors, three PVB levels and two time conditions, measured over six time periods. In addition we blocked on each of the twenty groups to minimize the variability due to the uniqueness of each group. Thus we had a 2x3x20x6 factorial design (See Kirk, 1968). The Geiser-Greenhouse conservative F value was used to evaluate the time periods by PVB interaction (Geiser and Greenhouse, 1958; Greenhouse and Geiser, 1956). The perceptual and observational dependent variables were analyzed by a 2x3 completely randomized factorial design. In addition, all of the dependent measures were correlated to each other and to the subjects' PVB scores.

Results

Table 1 contains the 18 by 18 correlation matrix of the dependent measures and the subjects' PVB scores. Table 2 contains the means, F values, and Omegas^2 for each tested comparison.

Main Effect for PVB Levels

Our earlier findings from the interview studies were replicated in a task group setting. More importantly, significant differences existed between PVB levels for perceptual and observational variables.

Behavioral Variables. There was a significant linear trend between high, middle and low PVB subjects for duration and frequency. The frequency finding was very weak (Omega^2=.03). Frequency and the subjects' PVB scores only correlated at .232. The duration finding was stronger (Omega^2=.19). Duration correlated with PVB scores at .531. Frequency and duration were minimumly related (.283).

Perceptual Variables. As was the case in the interview studies, there was a significant linear trend between PVB levels for perceived verbal participation. Perceived verbal participation continues to be strongly related to PVB levels ($Omega^2$=.31). It correlates with PVB scores at .572.

The main effect of PVB levels was significant for four other perceptual variables: Others' perceptions of influence, self perceptions of influence, perceived involvement, and others' perceptions of expertise. In each case there was a positive linear relationship between these four variables and PVB levels. The $Omegas^2$ for these relationships are quite strong, as are the correlaions between PVB scores and these four variables. Perceived satisfaction, while not significant for the PVB main effect, was positively correlated with PVB scores (.308). All of the perceptual dependent variables except perceived time pressure and others' perceptions of liking are correlated significantly with duration. It is important to note that others' perceptions of liking had no linear relationship to PVB scores or overt behavior.

Observational Variables. The main effect of PVB levels was significant for only three of the seven relationship categories. There was a significant linear trend for number of initiations. PVB scores positively correlated with number of initiations (.347). What is so surprising about the initiation finding is that there could only be eleven initiations per group. Yet number of initiations discriminated between PVB levels.

The main effect of PVB levels was also significant for reinitiations. Scheffe post-hoc analysis indicated that the significant difference in means occurred between the low PVB subjects and the average of the middle and high PVB subjects. The number of reinitiations correlated with PVB scores at .284.

The other significant difference was not expected. Scheffe post-hoc analysis indicated a quadratic relationship between PVB levels and number of negative extensions ($\overline{HPVB} < \overline{MPVB} > \overline{LPVB}$). Given the number of significance tests in this study it is possible that this is a chance finding.

The most interesting findings from the relationship categories are the significant and non-significant differences between PVB levels on certain task oriented categories and digressive categories. While the HPVB subjects initiated and reinitiated more issues in the interaction than did LPVB subjects, PVB levels were not associated with either digressive initiations or digressive extensions. Even within task oriented categories, the differences existed between HPVB subjects and LPVB subjects when they were introducing ideas, not when they were extending those ideas.

Main Effects of Time Pressure

There was no main effect of the time pressure manipulation on the perceived time pressure dependent variable. While the subjects did not report any significant differences between the two time limit conditions, they acted differently in the two conditions. There was a significant time pressure difference for frequency. In the time limit condition the subjects spoke less frequently per standardized time period than did the subjects in the no limit condition. Perhaps because of time restrictions, the subjects talked longer per speech act than did the subjects with no time restrictions. There was more sustained speech, hence less frequent acts. The subjects' perceptions of time pressure were related negatively to the number of their digressive initiations: The greater the perceived time pressure, the fewer the number of digressive initiations ($r=.329$).

STUDY TWO

The study examined the interaction patterns of 17 dyads made up of a high and low PVB subject.

Method

Procedure

Each subject was introduced to the other subject and asked to read a general instruction sheet. The sheet also included a circular arrangement of communication concepts to be used in discussing a video-tape of a two person conversation. The subjects were to come to a consensus about the relative importance of five communication concepts in explaining the video-taped conversation. After the subjects had read the instructions they silently watched the video-tape. The experimenter then came back into the room and put directional microphones around each subject's neck and informed them that they had ten minutes to discuss the conversation. The discussion was recorded stereophonically from the next room. After the discussion the subjects filled out a short questionnaire and talked to the experimenters.

Design

The experiment was disigned to create an interpersonal discussion consisting of a high and low PVB subject, and to control for sex differences.

From over 260 subjects who filled out the PVB test, 21 subjects were selected whose scores were 1 SD above the mean and 21 subjects were selected whose scores were 1 SD below the mean. Because the test was filled out with a battery of tests at the beginning of the semester, the subjects did not know why they were choosen for the experiment.

Since the strongest sex differences in interaction patterns are likely to occur between members of the opposite sex, the dyads were composed of either all female or all male members. There were eleven female dyads and ten male dyads.

Dependent Measures

There were five behavioral and three perceptual dependent variables reported in the second study. The behavioral variables were taken from a computer assisted analysis of the dyadic interaction patterns. The program was developed by Professor Thomas Schiedel at the University of Wisconsin. Following the work of Jaffe and Feldstein (1970), each voice channel of the stereophonic tape recorder was transmitted into an analog to digital channel of a PDP 12 computer. The computer simultaneously scanned both channels in half-second intervals. The first six minutes of each dyad were analyzed, making a total of 720 data points per dyad.

The computer translated the sound-silence patterns into a string of four symbols: 1 = neither talking; 2 = both simultaneously talking; 3 = high PVB subject talking; and 4 = low PVB subject talking. Each dyad's string of 720 numbers was then placed into a first-order Markov matrix. The entries in this matrix were then divided by 720 to create a first-order transition probability matrix. Finally, the first-order Markov matrix was transformed into a stochastic matrix in which the sum of the entries in each row is one. Appendix C contains the computer printout for one dyad. The five behavioral dependent variables are taken from this printout.

The percent of the total time that the high and low PVB subjects talked is computed by summing the high column and the low column from the second matrix. The percent of the total talk time that high and

low PVB subjects talked is computed by summing both the high and low columns from the second matrix and dividing that number into the percent of total time spent talking by the high and low PVB subjects. The percent of time that the high and low PVB subject interrupts is computed by dividing the total time one subject talks into the number of times the other member is talking followed by both talking. Verbal dominance is measured by the transition probability of both subjects talking followed by either the high or low PVB subject continuing to talk. Verbal initiation is measured by the transition probability of neither subject talking followed by either the high or low PVB subject talking.

Perceptual Variables. The three perceptual variables in this study are similar to the variables used in the first study. Perceived verbal participation of self consisted of four Likert-type ratings in which the subjects estimated their loudness, rate, spontaneity, and frequency. Perceived verbal participation of other consisted of the same four Likert scales in which subjects rated the verbal behavior of their partners. Perceived liking was measured by summing subjects ratings of their partner on three bipolar scales: Friendly-unfriendly, likeable-unlikeable, and pleasant-unpleasant.

Hypotheses

Based on our previous research, we tested six planned comparisons: $\overline{\text{HPVB}}$ would be greater than $\overline{\text{LPVB}}$ for percent of total time, percent of talk time, verbal dominance, verbal initiation, perceived verbal participation for self and other. All comparisons had to exceed a critical value at alpha equals .05 one tailed.

The differences between $\overline{\text{HPVB}}$ and $\overline{\text{LPVB}}$ for percent of interruptions and perceived liking were two tailed. HPVB subjects could interrupt more because they are verbally aggressive. However, LPVB subjects could interrupt more because HPVB subjects monopolize talking time. There is no clear prediction either way for perceiving liking. No differences were found in the first study.

A matched *t* test on dyads was used to evaluate all comparisons. In this way variability that was unique to each dyad could be minimized while testing for differences between PVB levels.

Results

Seven out of the eight comparisons between high and low PVB subjects were statistically significant. Table 3 contains the means of the different scores for each dependent variable and the corresponding critical values. Matched on dyads, the high PVB subjects talked a greater percent of the total time and talked a greater percent of the time spent talking than did the low PVB subjects. The high PVB subjects had a greater amount of verbal dominance and verbal initiation than did low PVB subjects. Cognitively, high PVB subjects perceived themselves as verbally participating more than the low PVB subjects saw themselves participating. In evaluating each other, the low PVB subjects saw the high PVB subjects verbally participating more than the high PVB subjects saw the low PVB subjects participating. There was no significant PVB difference for perceived liking.

One dependent variable, percent of talking time spent interrupting, was significant in the opposite direction. Low PVB subjects spent more of their talk time interrupting than did the high PVB subjects. While low PVB subjects interrupted more, high PVB subjects maintained the floor more after simultaneous talk than did low PVB subjects.

DISCUSSION

The results from these two studies expand our understanding of people's predispositions towards their verbal behavior in four areas. First, we can be fairly confident that differences in the behavior of PVB subjects hold in interpersonal settings. In both studies, the communication situation was conversational and relaxed. Whatever interpersonal variables emerged in the discussions, PVB scores continued to predict levels of participation.

Second, these findings begin to tell us something about the interaction between dissimilar PVB subjects. Behaviorally, there were clear differences between the high and low PVB subjects. These did not change over time. Cognitively, the dissimilar PVB subjects were congruent in their perceptions of themselves and each other. The HPVBs saw themselves as being verbally active and influential in the group. The LPVBs confirmed the HPVBs' self perceptions. The LPVBs saw themselves as being less verbally active, and less influential in the group. The HPVBs confirmed the LPVBs' self perceptions. There did not seem to be any perceptual distortions.

There were no differences between PVB levels for perceived liking; the means across the three groups were very high. There was not enough time for networks of interpersonal attraction to develop. Although people who are talkative are generally liked more than less talkative people, Bales suggests that individuals who initially dominate groups may be resented later on, especially if they are not helping the group achieve its goals. In that regard, the LPVBs spent more of their talk time interrupting the HPVBs, yet the LPVBs were unsuccessful

in holding the floor. Over time, this dynamic could lead to some resentment. We also found that MPVBs made more negative extensions than did HPVBs or LPVBs. This finding would be more enlightening if we knew who the MPVBs were negatively extending. A continuation of this behavior could lead to changes in perceived liking.

It is clear that we need to longitudinally investigate both similar and dissimilar groups of PVB subjects. Both of the studies reported here have only examined an initial discussion between dissimilar PVB subjects of the same sex. As such, one would expect the participants' predispositional states to account for most of the behavioral and cognitive variability in the discussions. Over time, the predispositional states' explanatory power should decrease as the discussions' interpersonal and group variables develop (Norms, roles, status, networks of attraction, etc.). Research is currently under way to examine the temporal interaction between predispositional states and interpersonal and group variables.

Our results also indicate that people's predispositions towards their verbal behavior are differentially related to task and social-emotional functions. While PVB scores were related to initiations and reinitiations of task issues, PVB scores were not related to either task oriented extensions or any digressive comments. The need to replicate these findings with the Interaction Chain Analysis and other category systems (e.g., Bales' IPA) is obvious. In using the Interaction Chain analysis again, we will separate our digressive category into procedural and social-emotional comments. It may be that PVB scores can only predict communication that fulfills task functions and not social-emotional functions.

Finally, the results from these two studies have shown that subjects' predispositions towards their verbal behavior have a rich set of behavioral and cognitive consequences in task oriented interactions. To a large degree, we have replicated past research that has found talkative persons to be more productive, task oriented, leader-like, and influential than their less verbal counterparts. However, the subjects we used were not selected or measured on the basis of their past verbal activity, but on their PVB scores. Given that the subjects were unacquainted and spent a brief period of time together, we are reanalyzing our data to determine the relative contributions of PVB scores and overt behavior to the subjects' perceptions of their participation, influence, and expertise.

This research has enlarged our understanding of the perceptual and behavioral differences associated with people's predispositions toward their verbal behavior. These two studies conclude that phase of our research. We are currently invesitgating the attributional and social perceptual processes that may develop and fulfill these communication expectations. We ultimately are interested in understanding the coding logic that explains both the existence of predispositions and the relationship between predispositions and overt behavior.

TABLE 1

Correlation Matrix of Dependent Variables

	PVB Scores	Perceived Verbal	Involvment	Time Pressure	Satisfaction	Frequency	Duration	Other Influence	Self Influence	Liking	Expertise	Initations	Reinitiations	Digress Initations	Positive Extensions	Negative Extensions	? Extensions	
PVB Scores	1.00																	
Perceived Verbal	.57	1.00																
Involvment	.42	.56	1.00															
Time Pressure	-.19	-.10	-.06	1.00														
Satisfaction	.31	.47	.56	.08	1.00													
Frequency	.23	.18	.13	.14	.30	1.00												
Duration	.53	.59	.46	-.18	.34	.28	1.00											
Other Influence	.52	.45	.20	-.06	.25	.15	.67	1.00										
Self Influence	.71	.62	.44	-.20	.30	.27	.77	.65	1.00									
Liking	-.01	-.03	-.06	-.01	-.08	.08	.01	.02	-.01	1.00								
Expertise	.39	.36	.34	.01	.34	.25	.45	.36	.34	.38	1.00							
Initiations	.38	.43	.36	-.09	.43	.15	.39	.29	.44	.02	.18	1.00						
Reinitiations	.28	.32	.17	-.04	.21	.50	.35	.31	.36	-.18	.21	.28	1.00					
Digress Initiations	.09	.07	.03	.33	.27	.67	.06	.01	.03	-.10	.07	.01	.44	1.00				
Positive Extensions	.09	.21	.15	.17	.25	.30	.14	.13	.18	-.04	.20	.10	.17	.17	1.00			
Negative Extensions	.04	.04	.13	.15	.30	.37	.35	.26	.22	-.11	-.01	.11	.34	.33	.34	1.00		
? Extensions	.02	.05	.11	.11	.09	-.01	.01	-.06	.06	-.06	.03	.09	.12	.04	.40	.10	1.00	
Digress Extensions	.08	.04	.18	.15	.39	.75	.12	.07	.03	.15	.18	.15	.36	.55	.23	.31	-.08	1.00

N=60 r=.25 p .05 r=.32 p .01 r=.40 p .001

TABLE 2

Mean Differences

Main Effect of PVB levels	High	Middle	Low	F value	Omega^2
Frequency	13.36	11.36	10.35	3.4	.03
Duration	27.98	21.60	15.29	7.4	.19
Perceived Verbal	14.60	12.85	11.05	12.71	.31
Others nfluence	56.30	49.80	37.05	14.15	.33
Self Influence	31.25	24.25	19.80	30.53	.52
Involvment	3.7	3.2	3.05	7.77	.22
Time Pressure	4.15	4.55	4.55	1.37	
Satisfaction	7.8	7.1	6.7	2.75	
Expertise	44.15	42.15	39.20	4.15	.13
Liking	47.00	46.25	7.80	<1	
Initiations	4.75	3.00	2.70	5.22	.16
Reinitiations	9.75	9.55	5.55	4.45	.12
Positive Extensions	8.05	6.60	7.20	<1	
Negative Extensions	2.25	3.55	2.05	3.56	.11
? Extensions	.45	.45	.40	<1	
Digressive Initiations	4.75	5.1	4.45	<1	
Digressive Extensions	12.10	11.60	11.00	<1	
Main Effect of Time Pressure	Time Limit	No Limit			
Duration	22.34	20.91	<1		
Frequency	8.46	14.93	45.7	.22	
Time Pressure	4.46	4.36	<1		

$F_{2,54}(.05)=3.26$ $F_{1,54}(.05)=4.02$

TABLE 3

Means of Difference Scores

	HPVB > LPVB	t value
Percent of total time	9.00	4.12
Percent of total talk	20.47	3.23
Verbal Dominance	1.24	3.93
Verbal Initiation	2.88	2.82
Self perceptions of Verbal Participation	3.76	7.50
Others' perceptions of Verbal Participation	1.48	2.05
	LPVB > HPVB	
Percent of Interrupting	10.64	2.87
Perceived Liking	1	1

$t_{16}(.95)=1.75$ one tailed $t_{16}(.95)=2.12$ two tailed

APPENDIX A

POST-GROUP QUESTIONAIRE

1. Please rate your verbal behavior during the discussion on the following four scales.

Very frequent ___ : ___ : ___ : ___ : ___ Very infrequent

Very loud ___ : ___ : ___ : ___ : ___ Very soft

Very rapid ___ : ___ : ___ : ___ : ___ Very slow

Very spontaneous ___ : ___ : ___ : ___ : ___ Very deliberate

In questions 2, 3, and 4 you are being asked to make a set of specific comparisons between each person in the discussion with every other person. For purposes of explanation, consider the following example.

Between each of the following pairs of participants, who do you think was most influencial? A is answering:

A ___ : ___ : ___ : X : ___ : ___ : ___ B

C ___ : ___ : ___ : ___ : X : ___ : ___ A

B X : ___ : ___ : ___ : ___ : ___ : ___ C

By marking an X in the middle position for the first pair, A thought that neither he nor B was more influencial than the other during the discussion. For the second pair, A indicated that he thought he was slightly more influencial than C was during the discussion. For the third pair, A indicated that he thought B was much more influencial than C was during the discussion. Please answer questions 2, 3, and 4 accordingly. In answering the questions, try to consider each pair separately.

2. Between each of the following pairs of participants, who do you think was most influencial in moving the group towards consensus?

_____ ___ : ___ : ___ : ___ : ___ : ___ : ___ _____

_____ ___ : ___ : ___ : ___ : ___ : ___ : ___ _____

_____ ___ : ___ : ___ : ___ : ___ : ___ : ___ _____

3. Between each of the follwoing pairs of participants, who do you think talked the most during the discussion?

_____ ___ : ___ : ___ : ___ : ___ : ___ : ___ _____

_____ ___ : ___ : ___ : ___ : ___ : ___ : ___ _____

_____ ___ : ___ : ___ : ___ : ___ : ___ : ___ _____

4. Between each of the following pairs of participants, who do you think contributed the most information about the general public during the discussion?

_____ ___ : ___ : ___ : ___ : ___ : ___ : ___ _____

_____ ___ : ___ : ___ : ___ : ___ : ___ : ___ _____

_____ ___ : ___ : ___ : ___ : ___ : ___ : ___ _____

5. How involved were you in the discussion?

Very involved ___ Moderately involved ___ Slightly involved ___

Not involved at all ___

6. Did you feel pressured during the discussion to the time allotted for completing the task?

Very pressured ___ Moderately pressured ___ Slightly pressured ___

Not pressured at all ___

7. How satisfied were you with your contribution to the discussion?

Very satisfied ___ Satisfied ___ Neutral ___ Dissatisfied ___

Very dissatisfied ___

8. Did you feel that the group had enough time to complete the task?

Way too much time ___ Slightly too much time ___ Exactly enough time ___

Not quite enough time ___ Not enough time at all ___

9. How satisfied were you with the discussion in general?

Very satisfied ___ Satisfied ___ Neutral ___ Dissatisfied ___

Very dissatisfied ___

10. Please indicate the general impressions you may have formed about _____ during the discussion by placing an X on one position for each of the following eight scales. An X in the middle position indicates that you are unable to make a discrimination for that particular scale.

honest ___ : ___ : ___ : ___ : ___ : ___ : ___ dishonest

unintelligent ___ : ___ : ___ : ___ : ___ : ___ : ___ intelligent

friendly ___ : ___ : ___ : ___ : ___ : ___ : ___ unfriendly

uninformed ___ : ___ : ___ : ___ : ___ : ___ : ___ informed

pleasant ___ : ___ : ___ : ___ : ___ : ___ : ___ unpleasant

unreliable ___ : ___ : ___ : ___ : ___ : ___ : ___ reliable

nice ___ : ___ : ___ : ___ : ___ : ___ : ___ awful

unqualified ___ : ___ : ___ : ___ : ___ : ___ : ___ qualified

11. Please indicate the general impressions you may have formed about _____ during the discussion by placing an X on one position for each of the following eight scales. An X in the middle position indicates that you are unable to make a discriminiation for that particular scale.

honest ___ : ___ : ___ : ___ : ___ : ___ : ___ dishonest

unintelligent ___ : ___ : ___ : ___ : ___ : ___ : ___ intelligent

friendly ___ : ___ : ___ : ___ : ___ : ___ : ___ unfriendly

uninformed ___ : ___ : ___ : ___ : ___ : ___ : ___ informed

pleasant ___ : ___ : ___ : ___ : ___ : ___ : ___ unpleasant

unreliable ___ : ___ : ___ : ___ : ___ : ___ : ___ reliable

nice ___ : ___ : ___ : ___ : ___ : ___ : ___ awful

unqualified ___ : ___ : ___ : ___ : ___ : ___ : ___ qualified

Thank you for your participation in this discussion. Since this research will be continuing for three weeks, we would appreciate your not talking about it until then. At that time we will also inform you of the results of both studies if there are any.

APPENDIX B

INTERACTION CHAINS

Group participants: Beverly, Gail, and Carol

F G A C C A F G G A D F G A C C
/CX, GX/ /B3-, G3-, C3-4+/ /GX, BX, GX/ /G9?, B9-/ /CX, GX/ /C10+, G10+, B10+/

A D D E D C A F B A C C B C C F
/C6+, G6-, B6+, G6?, C6-, G6-/ /G7+, CX B7+/ /C8-, B8-, G8-/ /B7?, G7+, C7+/ /CX/

A A D C C C D F A D C C F G
/G1+/ /C11?, G11-, B11-, G11-, B11-, C11+/ /GX/ /C5?, G5-, B5-, C5-/ /BX, GX/

A D C C B BF C B C B B B B F G
/G2?, B2-, G2-, B2-/ /C4?7?X, G4+, C10?, B10+4+, G1+, C10?4?/ /GX, BX/

B B C C B B C C F B B D F G G G G
/C7?10?, G7+10+, C4?, B10+, G10+, C10+/ /GX/ /B2-/ / C9?, G9-/ /BX, GX, BX, GX, BX/

B C C F G B E B B B C B B C C B F G G G G
/G9-, C9-, B9-/ /GX, CX/ /G9?, C9?5?6?8?, B6+, G9-8-6+, C6+, G8-/ /CX, GX, CX, GX, BX/

Relationship Category Code

A = Initiation
B = Reinitiation
C = Positive Extension
D = Negative Extension
E = Interrogative Extension
F = Digressive Initiation
G = Digressive Extension

APPENDIX C

PATTERNS IN DYADIC COMMUNICATION

	Neither	Both	High PVB	Low PVB
N	134	21	60	47
B	13	24	32	5
H	67	22	106	9
L	42	12	6	114

	Neither	Both	High PVB	Low PVB
N	.19	.03	.08	.07
B	.03	.03	.04	.01
H	.09	.03	.15	.01
L	.06	.02	.01	.16

	Neither	Both	High PVB	Low PVB
N	.51	.08	.23	.18
B	.23	.30	.41	.06
H	.33	.11	.52	.04
L	.24	.07	.03	.66

For High PVB
P TOTL H = .28
P TALK H = .45
H INTERP = .06

FOR LOW PVB
P TOTL L = .24
P TALK L = .38
L INTERP = .13

FOR GROUP
SILENCE = .36
ONE SPK = .53
BTH SPK = .11
CONTIN = .53
CHANGE = .47

TRANSITIONS

NB =	.08	NH =	.23	NL =	.18
BN =	.23	BH =	.41	BL =	.06

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